

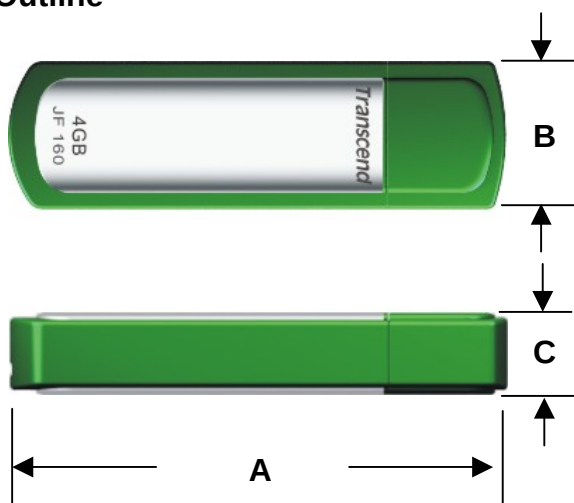
TS4GJF160

4GB USB2.0 JetFlash™

Description

TS4GJF160 is a 4GB USB Flash Drive with 1 pcs of 4Gx8 Flash (or 2 pcs of 2Gx8) Memory assembled on a printed circuit board.

Outline



Features

- Color: Green
- USB 2.0 compatible, true Plug and Play
- Powered directly via the USB port. No external power or battery needed
- PC-Lock Function: Makes JetFlash160 the key to your computer
- Partition & Security Function: Partition JetFlash160 and create a private partition with password protection
- Boot-Up Function: Makes JetFlash160 a bootable device
- LED indicates the usage status of JetFlash160

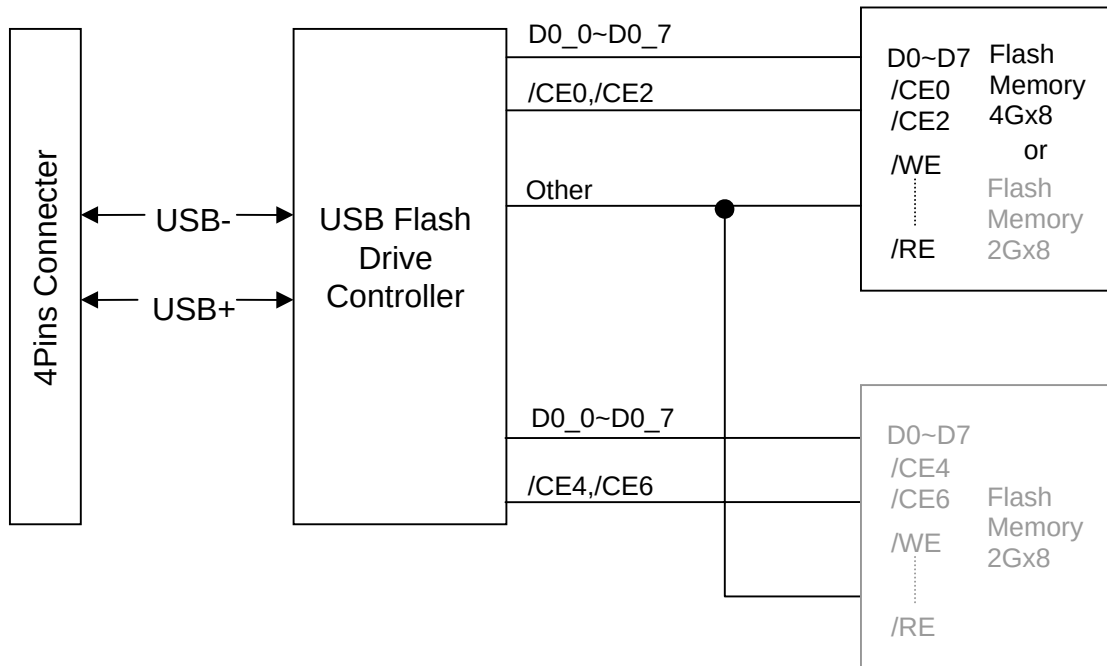
System Requirement

- Hardware: Desktop or notebook computer with USB port
- Operating System: Windows® 98SE, Windows® Me, Windows® 2000, Windows® XP and Mac™ OS 9.0 or later, Linux™ Kernel 2.4.2 or later

Dimensions

Side	Millimeters	Inches
A	61 ± 1.00	2.40 ± 0.04
B	18.6 ± 1.00	0.73 ± 0.04
C	9.8 ± 1.00	0.39 ± 0.04

Block Diagram



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Pinouts

Pin No.	Pin Name
01	VCC
02	USB-
03	USB+
04	VSS

Pin Identification

Symbol	Function
USB-	USB differential signal:
USB+	The pairs are used to transmit Data/Address/Command
VSS	Ground
VCC	USB power input

Specifications

Storage Capacity	4GB
Data Retention	10 years
Erase Cycles	>100,000 times
Connector Durability	10,000 times
System Performance	Read: 12MB/sec (max.), Write: 8MB/sec (max.)
Power Supply	DC 5V±10% via the USB port
Temperature Range	Operation: 0-70°C, Non-Operating: -40°C-85°C
Weight	10g
Certificates	CE, FCC, BSMI

Absolute Maximum Ratings

Symbol	Parameter	Rating	Unit
V _{CC}	Power Supply	4.5 to 5.5	V
V _{IN}	Input Voltage	-0.3 to 3.6	V
V _{CC18}	Internal Power Supply	-0.3 to 2.0	V

DC Characteristics: T_{OPR}=0°C~70°C ; V_{IN}=3.3V ; V_{CC18}=1.8V

Symbol	Parameter	Min.	Max.	Units
V _{IH} TTL	TTL Input High Voltage	2	V _{IN} +0.3	V
V _{IL} TTL	TTL Input Low Voltage	-0.3	0.8	V
V _{OH} TTL	TTL Output High Voltage	0.9V _{IN}		V
V _{OL} TTL	TTL Output Low Voltage		0.45	V
I _{OH} TTL	TTL Output High Current	-4		V
I _{OL} TTL	TTL Output Low Current		4	V
V _{IH} _USB	USB Input High Voltage for Low-/full-speed	2.0		V
V _{IL} _USB	USB Input Low Voltage for Low-/full-speed		0.8	V
V _I _USB_DIFF	Differential Input Sensitivity for Low-/full-speed	TBD		V
V _I _USB_CM	Differential Common Mode Input Range for Low-/full-speed	0.8	2.5	V
V _I _USB_HSSQ	USB High-speed squelch Input detection threshold	0.1	0.15	V
V _I _USB_HSDSC	USB High-speed disconnect Input detection threshold	0.525	0.625	V
V _I _USB_HSCM	USB High-speed Signaling Common Mode Range	-0.05	0.5	V
V _{OH} _USB	USB Output High Voltage for Low-/full-speed	2.8	3.6	V
V _{OL} _USB	USB Output Low Voltage for Low-/full-speed	0	0.3	V
V _{OH} _USB_HS	USB Output High Voltage for High-speed	0.36	0.44	V
V _{OL} _USB_HS	USB Output Low Voltage for High-speed	-0.01	0.01	V
I _{OH} _USB	USB Output High Current for Low-/full-speed	-10		V
I _{OL} _USB	USB Output Low Current for Low-/full-speed		10	V
I _{OH} _USB_HS	USB Output High Current for High-speed	40		V
I _{OL} _USB_HS	USB Output Low Current for High-speed		40	V

AC Characteristics:

Symbol	Parameter	Min.	Typ.	Max.	Units
TP _{ILH}	Input Rising Delay	0.61 (0.8pF)	0.72 (2.4pF)	0.92 (4.8pF)	ns
TP _{IHL}	Input Falling Delay	0.88 (0.8pF)	1.03 (2.4pF)	1.24 (4.8pF)	ns
TP _{OLH}	Output Rising Delay	2.40 (10pF)	3.42 (30pF)	4.88 C	ns
TP _{OHL}	Output Falling Delay	2.61 (10pF)	3.62 (30pF)	5.03 (30pF)	ns
TR	Output Rising Time	2.26 (10pF)	4.45 (30pF)	7.89 (30pF)	ns
TF	Output Falling Time	1.90 (10pF)	3.63 (30pF)	6.23 (30pF)	ns

Recommended Operating Conditions

Symbol	Parameter	Min.	Typ.	Max.	Units
V _{CC}	Power Supply Voltage	4.5	5	5.5	V
V _{IN}	Input Voltage	3.0	3.3	3.6	V
V _{CC18}	Internal Power Supply	1.62	1.8	1.98	V

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